

## Data Limitations & Needs

### Limitations

#### **Unreported Crashes**

This report contains data on *reported* crashes. One study in North Carolina found that 60 percent of the bicycle crashes in which a motor vehicle was involved were reported to the police, and virtually none of those cases not involving a motor vehicle were reported. The same study found that only 10 percent of bicycle crashes serious enough to require emergency room treatment were actually reported to the police. In short, the crashes in this report are only a fraction of all pedestrian and bicycle crashes in the District from 1997 to 1999.

#### **Lack of Exposure Data**

The fact that most *collisions* occur during the evening rush hour is most likely due to the fact that most bicycle and pedestrian *trips* take place at this time. This report makes no attempt to determine the relationship between the number of trips and the number of collisions, except in the most general terms. This is because we have no ‘exposure data,’ i.e., how many bicyclists and pedestrians are exposed to traffic and the risk of a crash.

#### **Form PD-10 Issues**

The Police Department’s PD-10 form contains about 70 fields for incident-related information and must be filled in by hand. Many forms are not complete or contain insufficient information. Some of the more prevalent problems found are noted below:

- ?? Missing information: Some fields were just not filled in (e.g., no intersecting street or block number given for a record);
- ?? Incorrect street identification (St. vs. Ave. vs. Pl. vs. Rd., etc.) or street misspellings;
- ?? Inadequate location description information (e.g., FBIs-for freeway, bridge or interchange, with no mile-marker number to note the location; or, listed street intersections that do not exist-7th St and 1st St, which run parallel to one another);
- ? Difficulty differentiating between bike and pedestrian accidents: Bike accidents are characterized as ‘pedestrian’ accidents under ‘type of accident.’
- ?? “Other” category used but not defined

Another issue is that the PD-10s do not include all information that might be relevant to bicycle crashes, such as whether the cyclist was wearing a helmet and, at night, whether the bicycle had lights.

#### **National Park Service Data**

Information about incidents occurring on National Park Service lands is not collected by DC MPD, nor is it included in the TARAS data. NPS personnel provided data on these incidents for this report through a specific request. Not all data elements found in the TARAS system were available for the NPS incidents, so could not be added into all statistics covered in this report. These incidents have been added into the aggregate incident and frequency figures and, where possible, will be mapped.

### Needs

Clearly there is a need for more accurate data collection methods at the time of the incident. Specifically, a hand-held device, preferably with GPS capability, would make the 'forms processing' aspect of incident reporting much more streamlined. Currently, it takes more than a year for District government staff to enter data from the PD10 forms into a database. Such devices could have built-in forms and drop-down menus to guide officers and make filling in fields with proper information less of a guessing game. For example, if an officer selected 'bicycle crash,' additional bicycle specific questions would appear. These devices could then be linked to a central DC GIS database system, automatically providing geographic coordinates and other data for the incidents.

In addition, improved data sharing between DC MPD and NPS (and more consistent collection methods) would ensure that all reported incidents occurring in the District are included in statistical analyses.